**Q8.** Calculate the maximum order of diffraction maxima seen from plane transmission grating with 2500 lines per inch if light of wavelength 6900 A falls normally on it.

**Given:-** N=lines/inch = 2500x 2.52 x 10-2 = 63 lines/m

= 6900A=6900x10-10 m

**Formula:-**

**Solution:-** for n= n max , sin =1

n max = = 2.3

**Ans:- Maximum order of diffraction is 2**